

## IN THE CLAIMS

- 1 1. (currently amended) A method of processing digital signals to be  
2 transmitted in analog form, said method comprising:  
3 in a digital-to-analog converter (DAC) having a conversion frequency,  
4 converting a digital signal having an input frequency to produce an analog  
5 signal image at a radio frequency greater than the input frequency, ~~wherein at~~  
6 ~~least one of the input frequency and the conversion frequency is selected in~~  
7 ~~respect to the other such that said analog image falls within a designated~~  
8 ~~communication band; and~~  
9 ~~using said analog signal image at said radio frequency for~~  
10 ~~transmission.~~ CHARACTERISED IN THAT:  
11 a) said digital signal is one of a plurality of digital input signals, each  
12 said digital input signal has an input frequency, and said input frequencies are  
13 positioned in non-overlapping portions of a frequency band whose width is  
14 one-half the conversion frequency;  
15 b) the output of the DAC includes a plurality of images of each digital  
16 input signal, and said images are grouped in successive frequency bands  
17 referred to as zones, such that each zone contains one image of each input  
18 signal; and  
19 c) the method further comprises selecting images for transmission,  
20 wherein at least two images are selected from different zones and correspond  
21 to different input signals.

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## 2-3 (canceled)

- 1 4. (currently amended) The method of claim ~~3~~ 1, further  
2 comprising ~~wherein said step of using includes:~~  
3 ~~providing and~~ directing each selected analog signal image onto a  
4 respective path;

5           amplifying each said analog signal image on said respective path; and  
6           transmitting each said amplified analog signal image using at least one  
7           respective antenna.

**5-7 (canceled)**

1           8. (currently amended) The method of claim 1 further comprising:  
2           adjusting a the conversion rate for converting said digital  
3           signal frequency so as to produce said at least one analog signal image at  
4           said radio transmission frequency.

1           9. (currently amended) The method of claim 1 further comprising:  
2           adjusting a at least one input frequency for said digital signal to be  
3           converted into analog form so as to produce said at least one analog signal  
4           image at said radio transmission frequency.

**10-20 (canceled)**

1           21. (currently amended) A transmitter comprising:  
2           ~~signal processing circuitry configured to receive a plurality of digital~~  
3           ~~signals and to position said digital signals in non-overlapping portions of a~~  
4           ~~conversion bandwidth defined as one half the rate of said converting;~~  
5           a digital to analog converter (DAC) having a conversion frequency and  
6           configured to receive a plurality of digital input signals, each having an input  
7           frequency, and to convert each digital signal of said plurality into analog form,  
8           thereby to produce analog signal images at different radio frequencies, each  
9           of which is greater than the corresponding input frequency;  
10          and CHARACTERISED IN THAT the transmitter further comprises:  
11          signal processing circuitry configured to receive said plurality of digital  
12          input signals and to condition said signals for input to the DAC by positioning

13 their respective input frequencies in non-overlapping portions of a frequency  
14 band whose width is one-half the conversion frequency; and  
15 transmitter circuitry configured to ~~use~~ select certain of said analog  
16 signal images for transmission, wherein said images are grouped in  
17 successive frequency bands referred to as zones, such that each zone  
18 contains one image of each input signal, and the transmitter circuitry is  
19 configured to select from different zones at least two images that correspond  
20 to different input signals. ~~the input frequencies are chosen in respect of the~~  
21 ~~conversion frequency, or the conversion frequency is chosen in respect of the~~  
22 ~~input frequencies, such that said analog images fall within one or more~~  
23 ~~designated communication bands.~~

**22 (canceled)**

1  
1 23. (currently amended) The ~~method~~ transmitter of claim 21 wherein  
2 said transmitter circuitry comprises:  
3 signal distribution circuitry configured to ~~receive said analog signal~~  
4 ~~images from said digital to analog converter and to provide~~ direct a first  
5 selected analog signal image of a first frequency band on a first path and a  
6 second selected analog signal image of a second frequency band on a  
7 second path;  
8 a first amplifier on said first path for amplifying said first selected  
9 analog signal image on said first path;  
10 a second amplifier on said second path for amplifying said second  
11 selected analog signal image on said second path;  
12 a first antenna connected to said first path for transmitting said first  
13 ~~amplified~~ selected analog signal image after amplification; and  
14 a second antenna connected to said second path for transmitting said  
15 second ~~amplified~~ selected analog signal image after amplification.

**24-32 (canceled)**